

REMARKS/ARGUMENTS

Reconsideration and allowance of the present application based on the following remarks are respectfully requested.

Upon entry of the above amendments, claims 1-17, with claim 5 amended to add a “.” (period) at the end of the claim, will be pending.

Claims 13-17 have been withdrawn pursuant to a requirement for restriction and election of claims 1-12. While the basis for restriction is that the composition as claimed can be used in many different processes, such as conversion of methane to hydrocarbons or the desulfurization of hydrocarbon feedstocks, the pending method (or process) claims would encompass any catalytic reaction of the type set forth in Group I, claims 1-12.

Accordingly, reconsideration and withdrawal of the requirement for restriction and rejoinder of claims 13-17 is earnestly solicited.

The claim objection to claim 5 is obviated by the above amendment adding a period at the end of the claim.

The defective oath/declaration is corrected by the enclosed new oath/declaration, which includes the correct title of the application.

Reconsideration and withdrawal of the rejection of claims 1-12, under 35 USC 103(a), as obvious over GB 1,357,335, in view of U.S. 4,026,698 to Koump, is respectfully requested for at least the following reasons.

In this rejection, the disclosure of GB 1,337,335 (GB 335) is relied on for disclosing that a copper containing catalyst bed is preceded by a guard bed containing a material more basic than zinc oxide.

Koump is relied on as evidence that “lead compounds are known to react with HCl.” Accordingly, the rejection is based on the assertion that it would have been obvious to replace the “metal” of the GB 335 reference with lead.

Applicant respectfully disagrees and submits that the practitioner of ordinary skill in the art would not have been motivated by Koump to replace the material more basic than zinc oxide with lead.

Clearly, in fact, the disclosure of GB 335 teaches away from selection of lead as an alternative to the compound which is more basic than zinc oxide.

According to GB 335, a compound more basic than zinc oxide, which is primarily exemplified by such basic compounds as alkali or alkaline earth metal oxides; alternatively, polyvalent metal compounds selected from CaO, BaO, MnO, Y₂O₃ and La₂O₃ (see, Example 4, page 4) is impregnated on an appropriate support and used as guard material. As described throughout the GB 335 specification, the alkalized support, e.g., alumina, tenaciously absorbs chloride, to prevent catalyst poisoning (see, e.g., page 2, lines 55-60 (“halogen-absorbing quantities”); Example 1, page 3, lines 58-61 (“chloride is tenaciously absorbed”); Example 4, page 4, lines 56-58 (“guard material has effectively absorbed chloride”)).

Therefore, one skilled in the art would appreciate that the compounds which are taught as effective for reducing poisoning of a shift catalyst by halogen, especially chlorine, are compounds which are more basic than zinc oxide, and capable of causing absorption of halide on an alkalized support.

Therefore, the practitioner, recognizing that lead is less electropositive than zinc, would not be taught and would not consider obvious, the use of a lead compound, as effective to reduce halogen poisoning of the shift catalyst.

This conclusion is not at all obviated or changed by the disclosure of Koump.

Koump is concerned with the removal of tin from molten iron and, as such, would not be consulted by the practitioner looking for alternatives to the more basic than zinc compounds for use in the process of GB 335.

Certainly, it is not a proper basis of a Section 103 obviousness rejection to rely on Applicant’s own disclosure of a lead compound that reacts with hydrogen chloride as evidence that it would have been obvious to replace GB 335’s more basic than zinc compound with a less electropositive lead compound.

In any event, it is respectfully submitted that the Examiner has mischaracterized the disclosure of Koump as teaching the reaction between lead compounds and hydrogen chloride.

In this regard, what is clearly described at column 2, lines 5-11, is the reaction between molecular chlorine gas and metal, e.g., lead; there is no disclosure of the reaction between lead compounds and hydrogen chloride, as such.

Moreover, as also described, the resulting chloride compound, e.g., lead chloride, leaves the molten iron bath as vapor; therefore, there is no disclosure of effectively absorbing chloride, as required in the process of GB 335.

Applicant respectfully submits, therefore, that the practitioner of ordinary skill in the art would not have been motivated by Koump (or by GB 335) to replace the more basic than zinc compound required by GB 335, with at least one lead compound, other than lead oxide, that reacts with hydrogen chloride.

Accordingly, at least for these reasons, reconsideration and withdrawal of the rejection of claims 1-12, under 35 USC 103(a), as obvious over GB 335 in view of Koump, is respectfully requested.

Reconsideration and withdrawal of the obviousness-type double patenting rejection of claims 1-12, over claims 1-10 of co-pending application SN 10/468,380, is respectfully requested for at least the following reasons.

In making this rejection, it is suggested that the only difference is that the co-pending claims recite a species of the genus of lead compounds.

Applicant respectfully disagrees.

As noted from claim 1 of co-pending application SN 10/468,380, the lead compound is characterized not only by its chemical composition but also by its weight average particle size.

Therefore, in the absence of evidence that the selection of weight average particle size would have been obvious at the time of the invention, the obviousness-type double patenting rejection should not be sustained.

In any case, noting that neither application has as yet been allowed, it is respectfully submitted that since the subject application is otherwise in condition for allowance, the subject application should be allowed and, if still deemed appropriate, an obviousness-type double patenting rejection could be made in the co-pending application.

Therefore, all objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned attorney for Applicant at the telephone number indicated below in order to expeditiously resolve any remaining issues.

Respectfully submitted,

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